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**BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES**

**Paper No. 29**

Application Number: 09/204,523

Filing Date: December 03, 1998

Appellant(s): FRANSMAN ET AL.

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James Weixel  
For Appellant

**EXAMINER'S ANSWER**

This is in response to the appeal brief filed 10/23/2003.

**(1) *Real Party in Interest***

A statement identifying the real party in interest is contained in the brief.

**(2) *Related Appeals and Interferences***

A statement identifying the related appeals and interferences which will directly affect or be directly affected by or have a bearing on the decision in the pending appeal is contained in the brief.

**(3) *Status of Claims***

The statement of the status of the claims contained in the brief is correct.

**(4) *Status of Amendments After Final***

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

**(5) *Summary of Invention***

The summary of invention contained in the brief is correct.

**(6) *Issues***

The appellant's statement of the issues in the brief is correct.

**(7) *Grouping of Claims***

Appellant's brief includes a statement that claims 1-8, 17-15 & 27 do not stand or fall together and provides reasons as set forth in 37 CFR 1.192(c)(7) and (c)(8).

**(8) *ClaimsAppealed***

The copy of the appealed claims contained in the Appendix to the brief is correct.

**(9) *Prior Art of Record***

5,383,112	Clark	1-1995
6,088,816	Nouri	7-2000
5,790,523	Ritchie	8-1998
5,583,995	Gardner	8-1997
5,576,155	Davis	11-1996

**(10) *Grounds of Rejection***

The following ground(s) of rejection are applicable to the appealed claims:

**I. Claims 1-3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Clark, (U.S. Pat # 5,383,112), in view of Nouri, (U.S. Pat # 6,088,816) and Ritchie, (U.S. Pat # 5,790,523).**

Considering amended claim 1, the claimed master scheduler arranged to control a near video on demand system comprising a schedule management system arranged to receive and validate a schedule reads on the operation of master scheduler 20, and serving computer 15, (col. 2, lines 55-67; col. 3, lines 1-11). Both master scheduler 20 and serving computer 15 may be implemented as personal computers and are enabled to receive & validate a NVOD programming schedule, (col. 4, lines 29-38; col. 8, lines 51-68). Specifically, the claimed feature of receiving and validating a schedule is broad enough to read on an operator using the Schedule Manager Segment 700 in order to create a schedule, and wherein the instant schedule is validated by being accepted and put into operation by the computer, as taught by Clark (col. 13, lines 49-68; col. 15, lines 17-32). Moreover the system in Clark ‘validates’ the schedule by checking it against certain required parameters and providing the operator with various messages when the instant created schedule is not in a valid form to be adopted, see col. 14, lines 10-24.

The claimed content manager system arranged to monitor and control the loading of assets into a video server according to the validated schedule, wherein the assets include video content scheduled for staggered transmission to subscribers of the NVOD system using a plurality of channels is met by Clark (col. 4, lines 25-40; col. 5, lines 17-23).

Regarding the amended claimed feature of the content manager including a GUI configured to allow an administrator to view a selected asset using a test channel dedicated for testing the selected asset, the master scheduler 20 of Clark provides a GUI for an operator to edit and modify a programming transmission schedule. Clark also teaches testing selected video assets which contain video content, but does not discuss implementing the procedure with a GUI. Nevertheless, Nouri discloses a means for an operator to view the status or condition of various assets at a server, (Abstract, lines 1-4; col. 3, lines 45-65; col. 6, lines 51-67). It would have been obvious for one of ordinary skill in the art at the time the invention was made, to modify Clark, with the disclosure of Nouri, providing operators with a visual/graphical display of the

status of various components of the server, at least for the desirable improvement of enabling the operator to more readily and efficiently adjust parameters of the system.

Regarding the amended claimed feature wherein the test channel is solely dedicated for testing the selected asset, Clark & Nouri do not teach such a feature. Ritchie is directed to a testing facility for testing a plurality of different assets, i.e. upstream receiver modules (URM) 802 and downstream transmitter modules (DTM) 804, at a CATV headend interface unit, see col. 25, lines 62-67 thru col. 26, lines 1-15 & col. 28, lines 52-60, and is therefore in the same field of endeavor as Clark & Nouri. In particular, Ritchie teaches that when testing the various modules, the test control module (TCM) 800, utilizes a particular RF test frequency, i.e. channel which only used for testing, see col. 26, lines 40-55 & col. 27, lines 12-50; col. 34, lines 40-62 & col. 36, lines 25-30.

One of ordinary skill in the art would have readily recognized the benefit and it would have been obvious for one ordinary skill in the art at the time the invention was made to modify the combination of Clark & Nouri with the teachings of Ritchie, wherein a particular channel is solely used for testing an asset, at least for the known purpose of conserving a certain portion of the bandwidth for distribution of the video to clients and to more efficiently utilize all available bandwidth.

Considering claim 2, Clark teaches that an operator utilizes the Schedule Manager software on one or more computers 15, 20, 64 or 66 in order to create monthly, weekly or daily schedules. The menu system utilized by the operator reads on the GUI based administrator recited in the instant claim.

Considering claim 3, Fig. 1 of Clark shows the Master Scheduler 20, as a separate entity from the video server 11. Also, Clark teaches that at least the weekly schedule may be edited and modified, see col. 13, lines 10-65.

## II. **Claims 4-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Clark, Nouri & Ritchie, in view of Gardner, (U.S. Pat # 5,583,995).**

Considering claims 4-7, Clark discusses an operator manually checking and updating the video storage/retrieval devices at a server, (col. 27, lines 1-25). Even though Clark does not specifically discuss bandwidth and channel optimization algorithms, at the time the invention was made such technology was well known in the art. In particular, Gardner provides a standard teaching of system which tracks configuration parameters of a headend and accordingly, makes dynamic adjustments and reallocations of servers assets, (col. 1, lines 58-65; col. 4, lines 14-58; col. 5, lines 21-40; col. 11, lines 61-68& col. 13, lines 42-55). It would have been obvious for

one of ordinary skill in the art at the time the invention was made to modify Clark, with a server reconfiguration algorithm, for the desirable benefit of a more efficient video delivery system, as taught by Gardner.

Regarding claim 5-6, the claimed feature of a tasks management system arranged to generate an indication of tasks to be performed in order to conduct loading of assets to the video server, and a notifications generator, which generates notifications of conditions associated with tasks are necessarily included in all of the references relied upon by examiner. All of the references disclose computerized video delivery systems. It is required that these computerized system include a list of tasks that must be performed in order to operate. Moreover, the computerized system necessarily includes a manner of checking that the conditions associated with the tasks. This is especially true since the relied upon references are directed to fault detection systems, which continually monitor the conditions of the server assets. Moreover, examiner points to Clark, (Abstract, lines 1-13; Fig. 5 & Fig. 6), which discusses a list of tasks that may be performed in loading assets to the video server, for distribution to clients.

As for claim 7, Clark is clearly directed to monitoring status and conditions of assets in a NVOD system, col. 4, lines 38-46.

Considering claim 8, Clark teaches a status screen for monitoring the status of the video player setting-up, see col. 4, lines 37-46. Nouri discusses using a GUI in order to query the status of servers on the system, (col. 6, lines 51-67).

### **III. Claims 17-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Clark & Davis, in view of Ritchie.**

Considering claim 17, the claimed method for controlling a NVOD system which corresponds with subject matter mentioned above in the rejection of claim 10, are likewise rejected. As for the amended claimed recitation of loading assets into a video server via group of channels according to a finalized schedule, the claimed feature reads on the combination of Clark & Davis (col. 8, lines 1-15; col. 29, lines 35-41). It would have been obvious for one of ordinary skill in the art at the time the invention was made, to modify Clark with technique of processing a program schedule to generate a finalized version, at least for the desirable purpose of detecting errors and providing the most accurate updated schedule to the clients, as taught by Davis.

However, Davis does not teach the amended claimed feature wherein at least one of the group of channels is a test channel, dedicated solely for the purpose of testing. Nevertheless, Ritchie provides a teaching wherein a downstream transmitter module (DTM) 804, has two RF output channels, a main RF channel and test RF channel. This RF test channel is solely utilized

for communication between the TCM 800, which reads on the amended claimed feature. It would have been obvious for one ordinary skill in the art at the time the invention was made, to modify Clark with the teachings of Ritchie wherein a particular channel is solely used for testing an asset, at least for the known desirable of advantage of avoiding the mixing of data signals with test signals.

Considering claim 18, Clark teaches maintaining an inventory of storage/retrieval device, (col. 16, line 49-68).

#### **IV. Claims 19-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Clark, Davis & Ritchie and further in view of Nouri.**

Regarding claims 19-20, Clark discusses monitoring/testing the various assets, which contain video content, (col. 4, lines 29-45). Also, the master scheduler 20 of Clark provides a GUI for an operator to edit and modify a programming transmission schedule, (col. 13, lines 10-38) but does not specifically show a GUI in order to view the status of assets. Nevertheless, Nouri discloses a means for an operator to view the status or condition of various assets at a server. It would have been obvious for one of ordinary skill in the art at the time the invention was made, to modify the combination of Clark, Davis & Ritchie, with the disclosure of Nouri, providing operators with a visual/graphical display of the status of various components of the server, at least for the desirable improvement of enabling the operator to more readily and efficiently adjust parameters of the system.

#### **V. Claims 21-25 & 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Clark, Davis & Ritchie as applied to claim 17 above, and further in view of Gardner.**

Considering amended claim 21, the method steps for validation of scheduling information which corresponds with subject matter mentioned above in the rejection of claim 17, are likewise rejected. The claimed step of receiving an asset from an asset provider is broad enough to read on one or more video storage/retrieval means being added to a video server, which is necessarily included in Clark. Even though Clark does not specifically discuss bandwidth and channel optimization algorithms, at the time the invention was made such technology was well known in the art. In particular, Gardner provides a standard teaching of system which tracks configuration parameters of a headend and accordingly, makes dynamic adjustments and reallocations of servers assets, (col. 1, lines 58-65; col. 4, lines 14-58; col. 11, lines 61-68; col. 13, lines 42-55). It would have been obvious for one of ordinary skill in the art at the time the invention was made to modify Clark, with a server reconfiguration algorithm, for the desirable benefit of a more efficient video delivery system, as taught by Gardner.

Regarding the amended claimed feature of modifying the schedule information at the master scheduler, and transmitting the modified schedule to a program guide system and to a business support system. As discussed in the rejection of claim 3, Clark teaches transmitting a schedule of programs derived in the Exhibition Schedule Manager 300, which may be embodied within a master scheduler 20, to computer 64 over a PSTN. It would have been obvious to transmit the schedule of programs to a billing support system, for the desirable purpose of accurately billing customers for services performed by the system of Clark. Such a feature does not represent a novel nor an unobvious technique, at the time the invention was made.

Regarding claim 22-23, Gardner extensively discusses the monitoring of asset and resource performance, with respect to established maximum expected performance of the instant assets, (col. 6, lines 41-55; col. 12, lines 49-55).

Considering claim 24, Official Notice is taken that at the time the invention was made, it was well known to limit the viewing or playing of video on demand services to subscribers based on several parameters, including the timeliness of the data. It would have been obvious for one of ordinary skill in the art at the time the invention was made, to modify the combination of Clark, Davis & Gardner, inhibiting the transmission/reception of video programming based on the timeliness of the instant video program, at least for the desirable advantage of a more efficient system which only offers programming to viewers which is currently available.

Considering claim 25, the combination of Clark (col. 14, lines 1-25) & Davis (col. 29, lines 1-25) reads on the claimed feature of receiving a program guide information and comparing it to scheduling information.

Considering claim 27, Clark receives, maintains and updates billing/pricing information, (col. 4, lines 34-37; col. 8, lines 35-45).

#### *(11) Response to Argument*

Appellants arguments have been carefully considered, but are not persuasive.

Beginning on page 9, and throughout the Brief, Appellant argues that the combination of Clark, Nouri & Ritchie do not provide the claimed test channel dedicated solely to testing a

selected asset, where the assets include video content scheduled for staggered transmission to subscribers of a NVOD system. Examiner respectfully disagrees with appellant's position and maintains the rejection for the following reasons.

Clark is directed to a NVOD system that transmits video content to a plurality of subscribers in staggered transmission; see col. 5, lines 10-24. The video content is transmitted using video players 17, which correspond with the claimed selected asset including video content. Clark explicitly teaches, "A status screen indicates whether a video playback machine is playing, rewinding, waiting to start playing, not in use, setting-up or has failed", see col. 4, lines 37-46.

With respect to the claimed feature of a GUI interface, again Clark teaches a status screen that provides diagnostic information concerning the video players 17, and that operations are controlled through a menu, but does not explicitly state that a graphical user interface is used. Therefore examiner relies upon Nouri, merely to teach the well-known improvement of a GUI used by an administrator to monitor and access server components. Appellant argues that since Nouri is introduced within the environment of a fault tolerant method, that the reference is somehow not combinable with Clark. Examiner respectfully disagrees and points out that the video players 17 of Clark correspond with the server components discussed in Nouri.

Nouri teaches that Administrators are in need of a graphical user interface for monitoring the health of network servers, col. 2, lines 64-67. The reference goes on to disclose the

advantages of a GUI system using point-and-click technology over traditional systems. Nouri discusses that user of the Recovery Manager 130 are able to manage, diagnose and restore service to the server system quickly in the event of a failure through a friendly graphical user interface. Thus it would have been obvious for one of ordinary skill in the art at the time the invention was made, to utilize GUI technology with Clark for the advantages of a user friendly interaction, as disclosed by Nouri.

It appears that appellant mentions throughout the brief that Nouri is directed to a fault tolerant system, in order to suggest that the reference is somehow incompatible with Clark. However, examiner points out that the portion of Clark that deals with testing for faulty video players 17 and replacing them with properly operating video players 17, is itself a fault tolerant system. Therefore the teachings of Nouri are consistent and properly combinable with Clark.

Now turning to specifically address the feature of a test channel, again it is pointed out that Clark unequivocally teaches a test channel for testing a selected asset, where the asset include video content scheduled for staggered transmission to subscribers of a NVOD system, see col. 4, lines 36-67 & col. 5, lines 10-24. The status computer 15 of Clark monitors the status of the video player 15, which requires the instant video players to be tested. As for the additionally claimed feature of a “test channel dedicated solely for testing”, Clark does not discuss in detail which channel(s) may be used to test the video players 17.

To provide this teaching examiner relies upon Ritchie, only to teach the feature of a “test channel dedicated solely for testing”. The relevant portions of claim 1 reads, “a content manager arranged to monitor and control the loading of assets into a video server according to a validated schedule, wherein the assets include video content scheduled for staggered transmission to subscribers of the NVOD system using a plurality of channels, the plurality of channels including a test channel dedicated solely for testing a selected asset”.

First of all, Ritchie discloses using a CATV system to transmit telephony signals to subscribers, Abstract. Since Ritchie is clearly a CATV system, it is disclosed that regular video programming is also transmitted to subscribers, see col. 9, lines 51-60 & col. 10, lines 5-20.

Secondly, Ritchie clearly teaches that a test channel is used to test a selected asset, such that the test channel is dedicated solely to testing the selected asset, wherein the instant dedicated test channel is from one of the plurality of transmission channels; see col. 26, lines 41-50; col. 27, lines 12-44 & col. 32, lines 7-13; col. 36, lines 25-30.

The downstream transmitter modules, DTM 804, of Ritchie correspond with the video players 17 of Clark, and according to Ritchie, the DTM 804 include a main RF output 818 for transmitting downstream signals to the CIU's 400 via the CATV network 12, col. 27, lines 12-15. The DTM 804 is the functional equivalent of the video player 17, since they are both used to transmit information to subscribers of the system.

Appellant appears to argue that since the main thrust of Ritchie is directed to the transmission of telephony signal, albeit over a CATV system, that Ritchie is non-analogous art, with respect to combining with Clark. Examiner respectfully disagrees, and again makes the point that the requirement of a test channel for testing a selected asset, wherein the selected includes video content to be distributed to subscribers in a staggered transmission as NVOD is taught by Clark.

Furthermore, Ritchie discloses that the telephony services transmitted by the DTM 804 is not limited to audio or text data. In fact, Ritchie discloses that the broadband CATV/telephony system is enabled to transmit audio, video, security monitoring and other services; see col. 4, lines 42-50. It also disclosed that the CIU 400 which receives downstream telephone service signals from DTM 804 may include a line card to enable video teleconferencing; see col. 17, lines 45-52.

Moreover, Ritchie certainly teaches that telephone system operators desire to use the expanded bandwidth available on these CATV/telephony systems to transmit new services, not previously practical on conventional 4 kHz PSTN lines. These new services include TV, interactive computing, shopping, entertainment and video conferencing; see col 3, lines 20-42.

Thus examiner respectfully disagrees with appellant's position on page 14, 1st paragraph that nothing in the disclosure of Ritchie defines DMT 804 or forward modulator 320 as video content, and likewise appellant's position on page 19, lines 3<sup>rd</sup> paragraph that Ritchie does not

teach transmission of video/visual data from a central location to a plurality of viewers, since the reference clearly teaches that video and video conferencing are some of the services transmitted over the CATV/telephony network, as examiner has demonstrated in the above paragraphs.

With respect to appellant's argument regarding a motivation to combine Ritchie with Clark, Ritchie teaches that the frequency dedicated to testing a selected DTM 804 may be from one of the on-line downstream frequencies; col. 36, lines 27-30. Appellant argues that the motivation set forth by examiner, citing col. 4, lines 54-64 and col. 5, lines 1-3 is not valid. Again examiner respectfully disagrees and points out that a careful reading of the above cited portion of the reference teaches that the system operators are concerned with the allocation of bandwidth for numerous new and old services. It is incumbent upon the operator to properly plan which services will use which bandwidth, i.e. frequencies, in order to efficiently operate a multi-channel headend and to overcome numerous well known problems associated with multiplexing data, such as overlapping channels, not enough bandwidth available when needed or wasting unused bandwidth.

Therefore for the reasons above, examiner maintains the final rejection of record for the instant claims, 1-3.

Appellant argues on page 22 with respect to the rejection of claims 4-8, using the Gardner reference. Claim 4 recites a configuration manager, arranged to track configuration parameters of a head-end of the NVOD, by determining NVOD channel allocations. On pages 22-24, Appellant

cites numerous portions of Gardner, which discuss the detection and reporting of channel or bandwidth configurations in a VOD system.

Furthermore, Gardner explicitly teaches that the system makes an analysis of available bandwidth on channels in order to more efficiently distribute data across a plurality of disks, referred to as RAID; see col. 2, lines 24-33. Appellant is also directed to col. 5, lines 20-25, which teaches that the foregoing considerations are used to determine the configurations of the video on demand systems. Examiner posits that at the time the invention was made, bandwidth allocation was a desirable feature of NVOD, as well as more generic VOD systems. Thus one of ordinary skill in the art would have readily recognized the benefit of applying the teachings of Gardner to the NVOD system of Clark.

On page 25, appellant asserts that the cited portions of Gardner are different from tracking configuration parameters of a headend. Examiner respectfully disagrees, since the subject matter disclosed in Gardner is directly relating to detecting the load and operating status of transmission servers. These topics are the essence of configuration parameters.

Appellant also discusses the rejections of claims 17-18 on pages 27-29. Appellant arguments are generally consistent with those set forth above with the respect to the feature of a test channel dedicate solely for testing a selected asset. Therefore examiner repeats the relevant response and maintains the final rejection for the instant claims.

With respect to claims 19-20, Nouri teaches that system administrators are in need of a GUI for monitoring the health of a network of servers. Clearly since Nouri teaches that a GUI is desirable to monitor the status of servers, one of ordinary skill in the art would have readily recognized the benefit of monitoring any number of processes undertaken by the server, or video players 17 of Clark, i.e. the loading of data to be transmitted to subscribers. This is true, since if the server or video player is not in operation due to failure, it cannot be used to transmit data to viewers.

Furthermore Clark teaches that the status screen indicates whether a video playback machine is playing, rewinding, waiting to start playing, not in use, setting-up or has failed, col. 4, lines 37-46. The disclosed setting-up corresponds with loading an asset. Thus combining Clark with Nouri would suggest monitoring the setting-up of an asset using a GUI.

Appellant also discusses the rejections of claims 21-25 & 27 on pages 32-34. Appellant arguments are generally consistent with those set forth above with the respect to the feature of a test channel dedicate solely for testing a selected asset. Therefore examiner repeats the relevant response and maintains the final rejection for the instant claims.

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For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

Reuben M. Brown  
Examiner  
Art Unit 2611

January 12, 2004

Conferees

Andrew Faile,



Chris Grant,



Reuben M. Brown



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